

Voltage Controlled Digital Attenuators



28 GHz Bidirectional 0-60 dB Voltage Controlled Digital Attenuator

is a digital attenuator with attenuation range of 0-62 dB. The attenuation level is controlled by TTL signal. It comes in very small size and works both directions. The RF signal can be transmitted and received simultaneously. The attenuation is varied between 0 to 62 dB range in 1 dB steps.



Frequency: 27.5 to 28.5 GHz

Reference Insertion Loss: 2.5 dB typical over band

Attenuation: 1 dB LSB steps to 62 dB

Rise Time/Fall Time: Less than 70 nano Seconds

DC Bias: +8V@0.293A, +12 Volts maximum

TTL Control: +5V Maximum for TTL High

Input 1 dB Compression Point: 20 dBm

Maximum RF Input Power (C.W.): 25 dBm maximum

Attenuation Accuracy: +/- 1 dB typ. Bit Error



Attenuation from 0-62 dB

The attenuator is bidirectional and signal can be transmitted in any directional simultaneously. This feature is useful when the signal has to be transmitted and received simultaneously during 5G radio filed testing.



Digital Attenuator

The attenuator is 6 bit digital attenuator with 1dB LSB steps.



Excellent Attenuation Accuracy

The attenuator has excellent accuracy with +/-1 dB typical bit error.



Wide Attenuation Range

The attenuator provides 0 to 62 dB attenuation range.



Small Size

These attenuators are housed in portable yet rugged gold plated aluminum enclosures, measuring 2" X 1.5" X 0.813" and weighs around 0.5 lbs. The size is very small compared to programmable rotary vane attenuators and best for applications where the space is limited.

Millimeter Wave products



Fast Switching Time

The proposed attenuator is much faster than programmable rotary vane attenuators. Rise and Fall time is 70 nano Seconds



Low Insertion Loss

The attenuator design includes amplifiers to achieve as low as insertion loss.